

Amendments to the Specification

Please replace the paragraph beginning on page 3, line 18, with the following rewritten paragraph:

It is another object of the present invention to provide a flash control device and a flash control system that are able to appropriately control slave flash devices even when a master flash device has small power capacity and far from the slave flash devices, or communication between the master flash device to the slave flash devices has to be made by light emission pulses reflected from a peripheral object or the like because the surrounding environment obstructs a line of sight from the master flash device to the slave flash devices at the time of photographing.

Please replace the paragraph beginning on page 12, line 17, with the following rewritten paragraph:

A fixed-light photometry part 32 is a circuit that divides the subject field into $22 \times 15 = 330$ regions, as shown in Fig. 3, to perform a photometry, and its photometry output is supplied to the camera microcomputer 31. The camera microcomputer 31 calculates an appropriate exposure value concerning the fixed-light exposure, based on: the output from the fixed-light photometry part 32; lens information such as the open F value, focal distance and exit pupil position of the lens (lens optical system) 1, stored in a lens microcomputer 41 provided in the lens body 40; sensitivity information of the imaging sensor 12 from a sensitivity setting part 34; and so on. Further, the camera microcomputer 31 resolves the calculated exposure value into a diaphragm stop value and a shutter value which are outputted to a diaphragm control part 37 and the shutter 11. The diaphragm control part 37 controls the stop-down/return of the diaphragm 10 in response to a release signal from a release switch 35.

Please replace the paragraph beginning on page 14, line 18, with the following rewritten paragraph:

When the light receiving part 21 receives an optical signal, the second SB microcomputer 61 calculates a main light emission amount from the main light emission amount designating value and a preliminary light emission value obtained by performing a

photometric processing by use of the second light emission monitor part 20, and uses a light emission trigger signal (X-signal) at the photographing to emit main light, and adjusts the light emission amount to a proper amount.

Please replace the paragraph beginning on page 20, line 20, with the following rewritten paragraph:

The next following two bits are used for a group designation (A, B, C, and ALL). The further next following ~~two bits~~ one bit called "mode" indicate whether the optical signal is the main light emission command or the preliminary light emission command. Since the slave SBs receive a command rather abruptly, indicating here what command it is helps the slave SBs to discriminate the command contents. The last two bits designate channels (CH 0-3). This CH designation is performed for preventing malfunction by designating different channels when, for example, two photographers have the same sets and use them at close positions.

Please replace the paragraph beginning on page 24, line 2, with the following rewritten paragraph:

Next, RefEV[i] is used to calculate a weight number RefG[i] for each region in accordance with the reflectivity by use of the following equation (3).

$$\text{RefG}[i] = 1/(2 \square (\text{Abs}(\text{RefEV}[i]))) \text{ --- (3)}$$

where i is 1 through 5; and

Abs() is a function for obtaining the absolute value of a parenthesized value.

Please replace the paragraph beginning on page 24, line 17, with the following rewritten paragraph:

Next, RefEV[i] obtained by the equation (2) is again used to calculate a reflectivity correction value RefMain for the whole subject field by use of the following equation (5).

$$\text{RefMain} = \log_2 (\Sigma(\text{wt}[i] * 2 \square \text{RefEV}[i])) \text{ --- (5)}$$

where: i is 1 through 5;

Σ () is a similar function to the ~~mathematical expression 16~~ equation (4); and

$\log 2$ is a function expressing the logarithm of 2.

Please replace the paragraph beginning on page 32, line 16, with the following rewritten paragraph:

When the fixed light is ~~equal to or~~ lower than 12 EV (ISO 100), no communication intensity increase is requested. When the fixed light is equal to or higher than 12 EV (ISO 100), a communication intensity increase is requested. The guide number of the optical signal is changed as shown in Fig. 24, depending on whether the communication intensity increase request occurs or not. According to the present embodiment, the intensity of the optical signal is increased in accordance with the brightness of the fixed light. This prevents the slave SB 60 from failing detection of the optical signal in a case where the subject field is bright and the optical signal is hidden in the ambient light. Thus, a reliable communication can be made regardless of the brightness of the subject field.

Please replace the paragraph beginning on page 33, line 17, with the following rewritten paragraph:

The output of the ~~photodiode~~ operational amplifier OP is an amplified light emission monitor voltage, which is compared with a comparison voltage V_{th} by a comparator CMP. A light emission initiation signal as a positive pulse allows an output Q of a D-type flip-flop DFF to be high, thereby turning on an IGBT and activating a trigger circuit to generate a high voltage that causes the xenon lamp to emit light. Thus, the xenon lamp starts light emission by the light emission initiation signal. The power source of the xenon lamp is a main capacitor C1 charged beforehand to an accumulated charge of about 330 V or so. After the light emission is started, the photodiode PD generates an optical current. With an increase in the light emission amount, the comparator CMP provides a low output, thereby resetting the DFF and hence setting the output Q low. Therefore, the IGBT is turned off, and the light emission is stopped. An optical pulse train transmitting data to a slave SB is provided by repeating this small-light-emission control.

Please replace the paragraph beginning on page 34, line 23, with the following rewritten paragraph:

That is, the present embodiment includes, in addition to the wireless multi-flash photographing mode as in the conventional technique as shown in Fig. 29(a), a wireless multi-flash photographing mode referred to as “commander mode” as shown in Fig. 29(b). In this commander mode, similarly to the commander mode in the first embodiment, the master SB itself does not emit main light even when it is attached. The photographer sets a mode of the flash device directly connected to the camera to the wireless multi-flash photographing mode, and also sets this flash device not to emit main light itself, thereby realizing the settings as shown in Fig. 29(b).

Please replace the paragraph beginning on page 36, line 10, with the following rewritten paragraph:

In general, a flash device built even in a so-called single-lens reflex (SLR) camera has small guide numbers and small light emission power. Therefore, if the flash ~~emission~~ emitting part 17 built in the camera emits an optical signal so as to control the slave SB 60, the power used for the main light emission may be in shortage in many cases, or if the power required for the main light emission is secured first, the power available for the communication may be in shortage, resulting in emitting the optical signal with insufficient intensity.